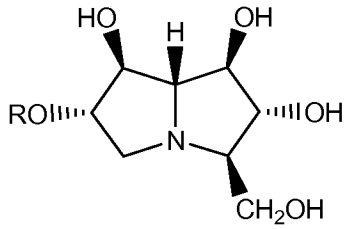
CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Claims:

Claims 1-75 (canceled)

76. (New) A method of treatment of a disease or condition comprising administering to a patient in need of such treatment a therapeutically effective amount of a polyhydroxylated pyrrolizidine compound selected from the formulae below:



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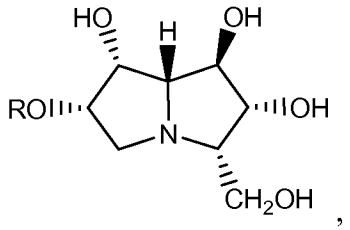

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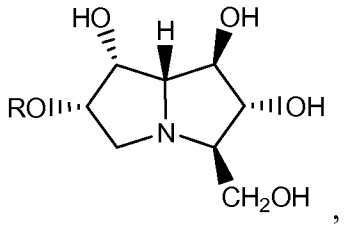

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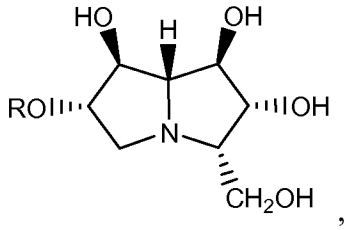

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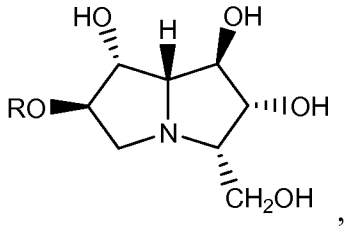

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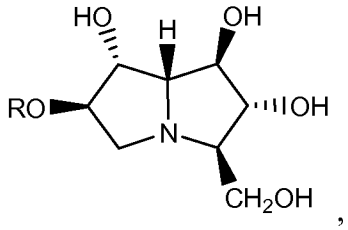

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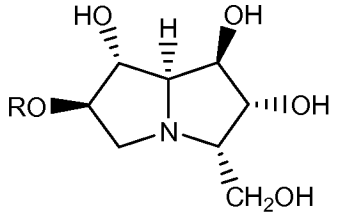
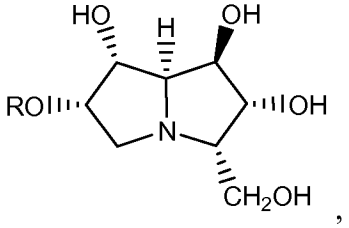


and



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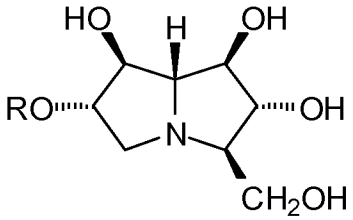
or a pharmaceutically acceptable salt or (C_1-C_4)acyl derivative thereof,

wherein R is selected from the group comprising hydrogen, straight or branched, unsubstituted or substituted, saturated or unsaturated acyl, alkyl, alkenyl, alkynyl and aryl groups, and a saccharide moiety; and

wherein said disease or condition is selected from a bacterial infection, a viral infection, lung cancer, breast cancer and melanoma.

77. (New) A method according to claim 76 wherein the pyrrolizidine compound, salt or derivative has the formula:



wherein R is selected from the group comprising hydrogen, straight or branched, unsubstituted or substituted, saturated or unsaturated acyl, alkyl, alkenyl, alkynyl and aryl groups.

78. (New) A method according to claim 76 wherein the pyrrolizidine compound is an acyl derivative.

79. (New) A method according to claim 78 wherein the pyrrolizidine acyl derivative is acylated at C-6.

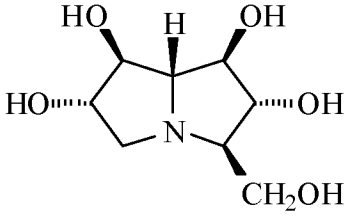
80. (New) A method according to claim 78 wherein the acyl derivative is an alkanoyl derivative selected from acetyl, propanoyl and butanoyl.

81. (New) A method according to claim 76 wherein R is a saccharide moiety.

82. (New) A method according to claim 81 wherein the saccharide moiety is a glucoside or arabinoside moiety.

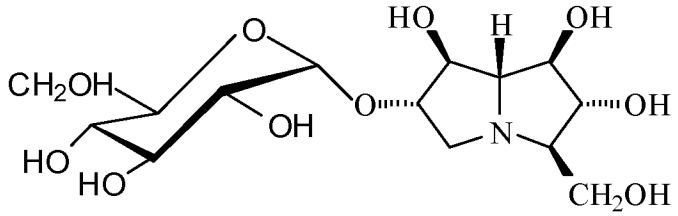
83. (New) A method according to claim 76 wherein the pyrrolizidine compound is chosen from:

(a) 1R,2R,3R,6S,7S,7aR)-3-(hydroxymethyl)-1,2,6,7-tetrahydroxypyrrolizidine (casuarine), wherein R is hydrogen and having the formula:



(b) a casuarine glycoside;

(c) casuarine-6-α-D-glucoside of the formula:



(d) 6-O-butanoylcasuarine;

(e) 3,7-diepi-casuarine;

(f) 7-epi-casuarine;

(g) 3,6,7-triepi-casuarine;

(h) 6,7-diepi-casuarine;

(i) 3-epi-casuarine;

(j) 3,7-diepi-casuarine-6-α-D-glucoside;

(k) 7-epi-casuarine-6-α-D-glucoside;

(l) 3,6,7-triepi-casuarine-6-α-D-glucoside;

(m)6,7-diepi-casuarine-6-α-D-glucoside;

(n) 3-epi-casuarine-6-α-D-glucoside, and

a pharmaceutically acceptable salt or acyl derivative of any of (a) – (n).

84. (New) A method according to claim 76 wherein said viral infection is selected from respiratory syncytial virus, hepatitis B virus, Epstein-Barr, Ebola virus, hepatitis C virus, herpes simplex type 1 and 2, herpes genitalis, herpes keratitis, herpes encephalitis, herpes zoster, human immunodeficiency virus (HIV), influenza A virus, hantann virus, human papilloma virus and measles.

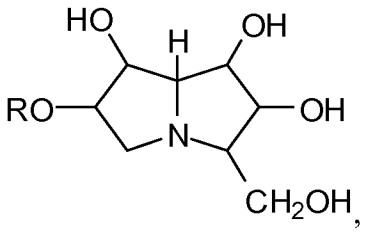
85. (New) A method according to claim 76 wherein said bacterial infection is caused by bacteria selected from *Bacillus*, *Escherichia* and *Francisella*.

86. (New) A method according to claim 76 wherein said polyhydroxylated pyrrolizidine compound is derived from one or more plant species sources selected from:

(a) a member of the taxon Myrtaceae; and

(b) a member of the taxon Casuarinaceae.

87. (New) A method of treatment of a disease or condition comprising administering to a patient in need of such treatment a therapeutically effective amount of a polyhydroxylated pyrrolizidine compound of formula:



or a pharmaceutically acceptable salt or (C_1-C_4)acyl derivative thereof,

wherein R is selected from the group comprising straight or branched, unsubstituted or substituted, saturated or unsaturated acyl, alkyl, alkenyl, alkynyl and aryl groups, and a saccharide moiety; and

wherein said disease or condition is selected from a bacterial infection, a viral infection, lung cancer, melanoma and breast cancer.

88. (New) A method according to claim 87 wherein said polyhydroxylated pyrrolizidine compound is administered as a pharmaceutical composition additionally comprising a pharmaceutically acceptable excipient.

89. (New) A method according to claim 76 wherein said polyhydroxylated pyrrolizidine compound is administered as a pharmaceutical composition additionally comprising a pharmaceutically acceptable excipient.